

In recent years, institutional investors looking for greater yields have increasingly turned toward alternative investments. But what precisely is an alternative asset? Googling<sup>1</sup> the phrase will turn up: "a term referring to nontraditional assets with potential economic value." Examples cited include art and antiques, precious metals, fine wines, rare stamps and coins, and other collectibles such as sports cards.

But when we're talking about financial instruments, this definition needs refinement. Perhaps the most sweeping definition may be simply that alternative investments are structured differently from traditional securities. That definition would certainly encompass the leveraged loans (also referred to as bank loans or syndicated bank loans) that are packaged and sold on the secondary market. The way they are originated, structured and administered is nontraditional in that it is labor-intensive and distinctly low-tech. But the way they are priced, monitored and secured makes them profitable and comparatively safe for investors — hence their appeal for investors looking for a new slice of the capital pie.

#### A Very Brief History of Debt

Secured debt has been a fact of life since the first cashstrapped farmer guaranteed a loan with in-ground crops. The lender, no doubt, negotiated a good return as well as a rough loan-to-value estimate. We can imagine that when the loan was repaid to everyone's satisfaction, others followed suit.

Fast-forward a few centuries to a time when multinational companies and sovereign nations had borrowing requirements well beyond any one bank's lending limits. To efficiently meet their needs, banks banded together to form syndicates that collectively extended jumbo loans. Each member of the syndicate shared in fees, principal, interest payments and collateral prorated to its share of the loan. A rudimentary secondary market soon followed as

1 "Google" is a registered trademark of Google, Inc.

### <u>Think of a CDO</u>

# as a giant mutual fund for institutional investors.

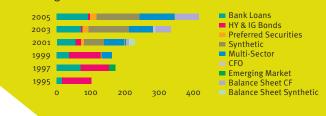
#### Historical CDO Market Growth

Issuance (\$billions) and number of global deals



#### CDO Global Structure Analysis

Number of global deals



banks sold pieces of their shares to other banks as a means of managing balance-sheet exposure to corporate names, industries and countries.

Although banks monopolized this market through the 1980s, other financial institutions began to look beyond traditional corporate securities to secured, floating-rate loans. While portfolio managers were able to quickly accept allocations of these assets, the middle and back offices that had to administer them were forced to develop new processes and adopt new platforms that could handle the leveraged loans' inefficiencies.

#### **Adding Structure to the Secondary Loan Market**

As leveraged loans began to populate institutional funds known as CDOs (collateralized debt obligations) and mutual funds referred to as Prime Rate Funds, other entities began to look more closely at them. Some could not be a part of the initial loan syndicate because of regulatory constraints. This problem was relieved once the major investment banks began to trade loans as securities, in a manner similar to equities and bonds.

These non-bank loan buyers had to come to grips with the complexity of the settlement process and the lack of market information, which provided less transparency and liquidity than they were used to. This has at last subsided as more market data has become available and as the buy side of the loan market has expanded.

Secondary loan trading volume and new issuance volume hit record highs in 2005. More than 75% of the leveraged loan market is now reported to be held by non-bank institutions. This growth has been fueled by hedge funds that have created unique structures that have produced betterthan-average returns to the overall hedge fund market.

#### **Leveraged Loans and Structured Funds**

Toward the end of the 1980s, a more structured secondary market emerged in the United States. Investment banks established special-purpose vehicles (SPVs) to hold pools of similar assets and issue securities backed by those pools of assets.<sup>2</sup> The CDO's assets initially included high-yield bonds, emerging market securities and syndicated loans, but later expanded to include

swaps, synthetics and asset-backed securities. This diversification was the beginning of the CDO market we know today.

CDOs are still the largest subset of the leveraged loan market, however, growth on a combined basis in other areas such as mutual funds, insurance companies, hedge funds and even private equity is strong. One of the first signs of this emerged in 2003, when the composition of the institutional investor leveraged-loan market showed a year-over-year decline in ownership by CDOs (67% to 62%), an increase for insurance companies (4% to 7%), a decline in the mutual fund sector (20% to 15%) and an increase in the hedge fund market from 1% to 10%.<sup>3</sup>

#### **Anatomy of a CDO**

A CDO's assets (including leveraged loans) are allocated to credit-based tranches, which may be rated from AAA (senior) to BBB (mezzanine) and non-investment grade for subordinated debt. The ratings and the rate of return are determined by the creditworthiness of the underlying assets, the depth of collateral coverage and the protec-

- 2 CDO Handbook, JPMorgan Securities, April 2, 2002
- 3 Source: CSFB



tion afforded by more junior tranches. Investors may also invest in equity, the riskiest — and potentially most lucrative — tranche.<sup>4</sup>

To simplify, CDOs are diversified corporate obligations secured by loans, bonds, other assets and derivatives, and sold to investors. Mark Murray, head of JPMorgan FCS, says, "Think of a CDO as a giant mutual fund for institutional investors."

The CDO product, once dominated by U.S. institutions, has spread throughout Europe and Asia, which today are major providers of the syndicated loans that institutional investors find so appealing.<sup>5</sup>

#### **New Structures**

The variety of CDOs has expanded as well, as investors and issuers look for diversification and return. Innovations include different structures and asset types that meet evolving global demand. Here, very briefly, are a few of them.

CDOs may be either cash-flow or market-value.

- Cash-flow CDOs are rated by how well the cash flow of the underlying assets can service principal and interest payments.
- Market-value CDOs are rated by the value of the underlying assets, which are marked-to-market periodically.

CDOs can also be managed or static.

- Managed CDOs are actively traded by collateral managers.
- Static CDOs are traded under limited conditions, the collateral remains with the CDO for its life.

Cash and synthetic CDOs make up a third set of distinctions.

- Cash CDOs are backed by assets and carry the associated default risks. The categories mentioned above are all cash CDOs.
- Synthetic CDOs offer exposure to an obligor through credit default swaps. Think of synthetic CDO as

insurance; the counterparty pays a premium to the CDO to guarantee a third-party credit in the event of default. These credit derivatives are attractive because they may require little or no cash outlay.

CDOs are categorized as *balance sheet* or *arbitrage* CDOs depending on the motivation of the seller.

- ▶ With *balance sheet* CDOs, sellers (usually banks) sell the assets to the CDO to manage exposure, shrink their balance sheets and reduce required capital.
- ➤ Arbitrage CDOs are inspired by equity tranche investors who hope to achieve a leveraged return between the after-default yield on assets and the financing costs due to debt tranches. This spread, or funding gap, is the arbitrage.

CDOs backed by real estate assets, diversified assetbacked securities (ABS), trust-preferred securities and highly rated asset-backed securities, rather than the more traditional bonds and syndicated loans, have gained recent popularity.

#### **For Global Investors**

Much of the growth in CDOs is coming from Europe and Asia, with local markets evolving to meet specific needs. The CDO market in Asia, for example, is highly fragmented. Almost half of the issuance volume is comprised of balance sheet transactions structured by Japanese banks seeking capital relief. Growth in the European market, on the other hand, has been fueled primarily by synthetic structures in France, Germany and the United Kingdom.<sup>7</sup>

#### The Future of CDOs<sup>8</sup>

While CDOs began in the United States, they have been enthusiastically adopted in Europe and Asia. JPMorgan's CDO professionals have studied the

- 4 Source: CDO Handbook
- 5 Source: "Universal Banking? Credit Markets Move (Patchily) Toward Convergence," by Meredith Coffey
- 6 Source: CDO Handbook
- 7 Source: JPMorgan CDO Current State
- 8 Source: ITS CDO Current State

## Wall Street Office<sup>™</sup>

#### Portfolio Management System

Recognizing the intricacies of the alternative investment market and the difficulty of accurately managing the underlying assets in structured deals, FCS developed **Wall Street Office** (WSO)<sup>9</sup>, a portfolio management system that has become the CDO gold standard since its launch in the early 1990s. Today, WSO is used to manage more than \$200 billion in assets, providing immediate access to real-time data in more than 150 standard reports.

Wall Street Office makes the management of portfolios and structured deals a more efficient and effective process. Straight-through processing, from trading to tracking through reporting, provides one solution for all portfolio management needs. Functionality tailored to the asset types found in structured deals and compliance reporting specific to each structure allow clients to devote their time to maximizing the performance of their portfolios.

**WSO Accounting** is a customized interface that allows users to convert transactions performed in WSO Administrator into journal entries that can be imported into a general ledger package.

**WSO Administrator** is the core of the WSO portfolio management system. Users enter trades, process daily transactions, view position details and store records of referential data.

**WSO Advanced Reporting** provides the ability to publish and schedule reports and includes a wizardbased custom reporting tool. **WSO Agent** completes the front to back office solution by providing software for loan and participation administration.

**WSO Compliance** allows structured fund managers to monitor and manage their funds efficiently with respect to their indentures or unique reporting requirements. Its capabilities include performing pretrade hypothetical scenarios.

**WSO Fax** is a Web-based system used in conjunction with an FCS service that categorizes agent notices on syndicated loans. WSO Fax facilitates the efficient use and historical retrieval of information by portfolio managers and their agents, such as auditors.

**WSO Performance** allows managers to quickly analyze their portfolios and look at AIMR-compliant performance attribution.

**WSO Reporting** provides immediate access to more than 100 standard accounting and portfolio analysis reports.

**WSO Security** is an applicationbased security feature that gives users access to information that is directly related to their jobs and responsibilities.

**WSO Web** is the Web-based application used by clients who choose to outsource their back office operations to JPMorgan FCS Data Services.

 $9\ \ Source: FCS\ marketing\ materials\ (print\ and\ online): fcsoft.com/n.x/Public/Home/Solutions/Wall\%20Street\%20Office$ 



regional markets and anticipate the near future to unfold according to the unique demands of each. Globally, the future of the CDO market will see a host of structures of varying complexity and asset types, which will put pressure on service providers to deliver rapid, flexible and affordable solutions.

**Asia:** Regulatory changes have dramatically changed the landscape for structured credit products in Asia, as policymakers have lifted various restrictions for insurers and domestic banks to invest in CDOs for the first time. As these investors become more familiar with diversifying asset types and structures, they will issue more complex cross-border transactions. Growth will move away from Japan to Taiwan, South Korea and Singapore, and will increase as participants become more comfortable with complex structures.

**Europe:** Euro-denominated CDOs now account for 35% of total CDO volume. Collateral diversification will usher in more multicurrency transactions, while cross-border deals will result in fewer local transactions. As securitization laws shape the European markets, Germany, France and Ireland are expected to see higher levels of CDO issuance.

United States: Innovations in new structures and asset classes continue as collateral managers and investors seek new yield opportunities while minimizing risk. Standardized international reporting and regulations will require greater levels of disclosure and transparency of structured transactions such as CDOs. Liquidity will grow with wider investor participation (hedge funds, as discussed), and the availability of new products and maturing technology.

#### **Hedge Funds Keep Pouring In**

Hedge funds have now become the third-largest institutional investor in the leveraged loan market. The growth in the hedge fund business is spurred by decreasing returns to CDO equity investors and an overall appetite of alternative investors seeking greater than 15% returns. The leveraged loan market is unusual in that it trades on inside information, is not regulated by the SEC and is composed of many banks, structured vehicles

and mutual funds that have limited portfolio liquidity. Not surprisingly, then, a segment of experienced loan investors have migrated to hedge funds to try and gain an arbitrage advantage. An early belief that hedge funds were only interested in the distressed portion of the leveraged loan market does not appear to be accurate, as the distressed market (loans priced less than 90) decreased in 2003 from 34% to 8%.

A major sign of continued growth and staying power is the increasing number of hedge fund managers that are entering the leveraged loan market. With them come the overhead and the need for more sophisticated systems and reporting to handle the unconventional cash flows, reporting and corporate actions of leveraged loans. Over the past three years, JPMorgan FCS, the industry leader in software and services for the leveraged loan market, has seen significant hedge fund client growth.

JPMorgan FCS has been an industry leader in leveraged loan and high-yield solutions since 1997. The business provides portfolio management software and outsourcing services that increase the efficiency and accuracy of tracking and managing portfolios of syndicated bank loans, high-yield bonds, asset-backed securities, equities and certain credit derivatives. FCS continues to provide solutions to participants in this market, and maintains an arm's-length vendor relationship with JPMorgan Chase Bank, N.A.

Most recently, FCS has expanded from a traditional software company to a software and services company via its back office outsourcing solution. "The current goal is to expand the product offering to include leveraged loan data that will provide a platform to significantly change a historically inefficient market," says Mark Murray, head of JPMorgan FCS. This will complete a multiyear strategy, and we will become a technology company with a product suite consisting of software, services and data." • • •

For more information about JPMorgan FCS products and services, visit fcsoft.com.